

Title (en)
Ball valve.

Title (de)
Kugelventil.

Title (fr)
Soupape sphérique.

Publication
EP 0385812 A1 19900905 (EN)

Application
EP 90302297 A 19900305

Priority
US 31834289 A 19890303

Abstract (en)
Flow control valves (10) and (80) each include a cylindrical body (11) or (82) that is open through a number of ports (13), (14) and (15), the ports to be opened and closed by a resilient ball (16) that is selectively moved into and out of alignment with each port by lowering and turning a valve basket (15) and (60). The valve basket has co-planar essentially parallel arms (60a,60b) that extend from ends of a web (61) wherebetween the resilient ball (16) is caged, which valve basket (15;60) is secured to the end of a valve basket stem (19) or (89). The valve gasket is displaced vertically and turned by an actuator (48) or (94), through a handlee (49) or (109), the turning of which handle operates through a system of opposing upper and lower cams (40) and (23) or a clutch cam system (81) to both vertically displace and turn the valve basket system stem and valve basket.

IPC 1-7
F16K 1/14; **F16K 11/056**

IPC 8 full level
F16K 1/14 (2006.01); **F16K 11/056** (2006.01); **F16K 31/44** (2006.01)

CPC (source: EP US)
F16K 1/14 (2013.01 - EP US); **F16K 11/056** (2013.01 - EP US); **F16K 31/44** (2013.01 - EP US); **Y10T 137/86863** (2015.04 - EP US)

Citation (search report)

- [YD] US 440025 A 18901104
- [Y] CH 342057 A 19591031 - MINGORI CESAR [FR]
- [A] US 2645448 A 19530714 - BUGG KENLY C
- [A] US 2368120 A 19450130 - DOWNEY GEORGE T

Cited by
FR2717549A1; US5779223A; ES2123362A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0385812 A1 19900905; **EP 0385812 B1 19940907**; AT E111196 T1 19940915; AU 5061290 A 19900906; AU 626643 B2 19920806; CA 2011266 A1 19900903; CA 2011266 C 19991019; DE 69012174 D1 19941013; JP 2775023 B2 19980709; JP H02266173 A 19901030; US 4934408 A 19900619

DOCDB simple family (application)
EP 90302297 A 19900305; AT 90302297 T 19900305; AU 5061290 A 19900302; CA 2011266 A 19900301; DE 69012174 T 19900305; JP 5257990 A 19900303; US 31834289 A 19890303